

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: NEO-RAY

Report Number: P333311-927

Luminaire Tested: **S125DIP-S1270D590U927-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333311-927
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-11,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125DIP-S1270D590U927-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 590 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5684.2 lumens
Efficiency: N/A
Efficacy: 103.2 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.31
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: Semi-Direct

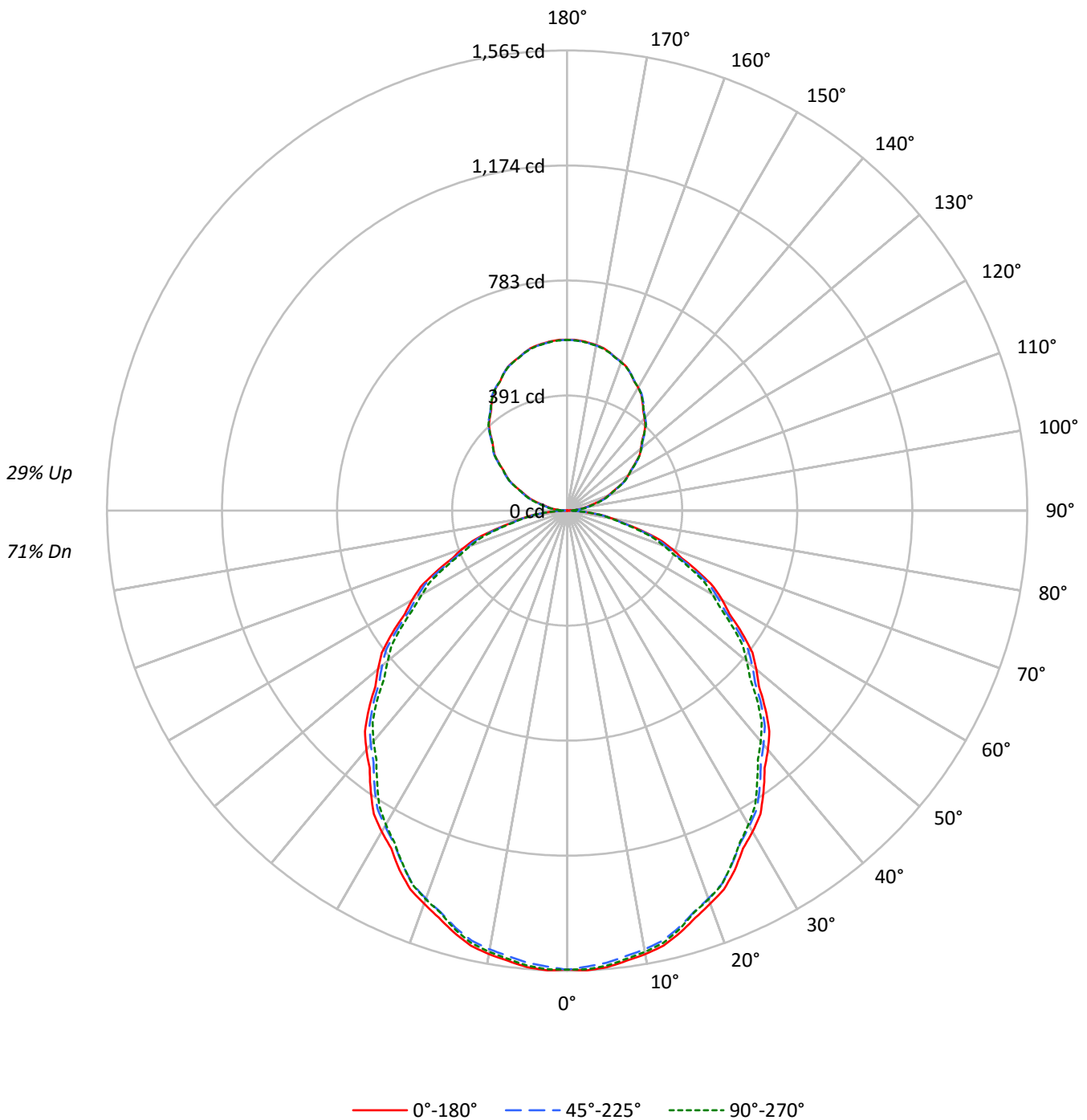
Input Watts (W): 55.1
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333311-927

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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	112	112	112	112	106	106	106	106	95	95	95	85	85	85	76	76	76	71
1	103	98	94	90	97	93	89	86	84	81	78	75	73	71	67	65	64	60
2	93	86	79	74	88	81	76	71	73	69	65	66	62	59	59	56	54	50
3	85	75	68	61	80	72	65	59	65	59	54	58	54	50	52	49	46	42
4	78	67	58	52	74	63	56	50	57	51	47	52	47	43	47	43	39	36
5	72	60	51	45	68	57	49	43	51	45	40	47	41	37	42	38	34	32
6	66	54	45	39	62	51	43	38	46	40	35	42	37	33	38	34	30	28
7	61	48	40	34	58	46	39	33	42	36	31	38	33	29	35	30	27	25
8	57	44	36	31	54	42	35	30	39	32	28	35	30	26	32	28	24	22
9	53	40	33	27	50	39	31	27	35	29	25	32	27	23	30	25	22	20
10	50	37	30	25	47	36	29	24	33	27	23	30	25	21	27	23	20	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10083	10083	10083
5°	10105	10009	10073
10°	10044	9938	9996
15°	9934	9819	9860
20°	9779	9652	9669
25°	9612	9453	9443
30°	9405	9238	9192
35°	9183	9008	8881
40°	8955	8757	8632
45°	8709	8528	8359
50°	8439	8252	8004
55°	8178	7942	7719
60°	7865	7626	7355
65°	7494	7248	7002
70°	7138	6811	6577
75°	6503	6288	6071
80°	5787	5694	5560
85°	5039	5128	4846



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	147.2	2.6
10°-20°	415.8	7.3
20°-30°	613.9	10.8
30°-40°	716.4	12.6
40°-50°	719.5	12.7
50°-60°	631.6	11.1
60°-70°	470.6	8.3
70°-80°	269.1	4.7
80°-90°	79.6	1.4
90°-100°	38.9	0.7
100°-110°	114.9	2.0
110°-120°	194.5	3.4
120°-130°	256.0	4.5
130°-140°	286.9	5.0
140°-150°	281.2	4.9
150°-160°	236.2	4.2
160°-170°	157.0	2.8
170°-180°	54.9	1.0
0°-30°	1177.0	20.7
0°-40°	1893.4	33.3
0°-60°	3244.5	57.1
0°-90°	4063.7	71.5
90°-120°	348.3	6.1
90°-150°	1172.4	20.6
90°-180°	1620.0	28.5
0°-180°	5684.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1561	1561	1561	1561	1561	
5°	1559	1556	1544	1554	1554	148
15°	1486	1482	1468	1474	1475	419
25°	1349	1342	1326	1329	1325	620
35°	1165	1159	1142	1136	1126	728
45°	954	948	934	920	915	734
55°	726	722	705	694	686	648
65°	490	487	474	464	458	486
75°	261	258	252	248	243	278
85°	68	69	69	68	65	76
90°	0	4	7	10	11	5
95°	29	30	35	38	39	31
105°	103	105	108	111	112	110
115°	195	197	198	197	197	193
125°	284	287	287	287	286	254
135°	370	372	373	373	371	285
145°	448	450	451	451	450	280
155°	512	512	513	514	512	236
165°	557	556	557	558	556	157
175°	579	578	578	580	577	55
180°	581	581	581	581	581	



TEST NUMBER: P333311-927

CATALOG NUMBER: S125DIP-S1270D590U927-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1561.2	1561.2	1561.2	1561.2	1561.2	1561.2	1561.2	1561.2	1561.2	1561.2	1561.2
2.5°	1565.1	1564.5	1563.8	1563.1	1562.5	1561.1	1558.9	1556.6	1554.5	1552.3	1554.5
5°	1558.7	1558.1	1557.6	1557.0	1556.5	1554.9	1552.1	1549.4	1546.7	1543.9	1546.3
7.5°	1544.4	1543.8	1543.3	1542.7	1542.1	1540.4	1537.4	1534.4	1531.4	1528.4	1530.7
10°	1531.5	1531.0	1530.4	1529.9	1529.3	1527.6	1524.6	1521.5	1518.5	1515.4	1517.7
12.5°	1515.7	1514.7	1513.8	1512.8	1511.8	1509.9	1507.0	1504.3	1501.5	1498.7	1500.5
15°	1485.8	1485.0	1484.2	1483.4	1482.6	1480.6	1477.6	1474.6	1471.6	1468.5	1469.9
17.5°	1451.5	1450.3	1449.1	1447.9	1446.7	1444.5	1441.4	1438.2	1435.1	1431.9	1433.7
20°	1422.8	1422.3	1421.7	1421.2	1420.6	1418.6	1415.0	1411.4	1407.9	1404.3	1406.2
22.5°	1394.2	1393.2	1392.2	1391.2	1390.2	1388.1	1384.7	1381.4	1378.0	1374.7	1375.9
25°	1348.8	1347.3	1346.0	1344.7	1343.2	1340.8	1337.2	1333.6	1330.1	1326.5	1327.1
27.5°	1295.6	1294.8	1294.0	1293.2	1292.4	1290.1	1286.4	1282.7	1279.1	1275.3	1275.5
30°	1261.1	1260.2	1259.4	1258.5	1257.7	1255.3	1251.2	1247.1	1242.9	1238.8	1238.3
32.5°	1223.5	1222.3	1221.0	1219.7	1218.5	1216.0	1212.3	1208.6	1204.9	1201.3	1200.3
35°	1164.7	1163.6	1162.5	1161.4	1160.3	1157.9	1154.0	1150.2	1146.3	1142.5	1141.1
37.5°	1103.7	1102.3	1101.0	1099.5	1098.2	1095.7	1092.1	1088.5	1084.8	1081.2	1079.2
40°	1062.2	1060.8	1059.5	1058.0	1056.7	1054.1	1050.3	1046.4	1042.6	1038.7	1036.3
42.5°	1017.7	1016.6	1015.4	1014.2	1013.1	1010.6	1006.8	1002.9	999.1	995.2	993.0
45°	953.5	952.4	951.3	950.2	949.1	946.9	943.6	940.3	937.1	933.7	930.4
47.5°	884.3	884.4	884.5	884.5	884.6	882.6	878.7	874.7	870.8	866.8	863.5
50°	839.9	839.1	838.2	837.4	836.5	834.5	831.2	827.9	824.7	821.3	817.8
52.5°	794.4	793.8	793.2	792.6	792.0	790.0	786.4	782.9	779.4	775.9	772.8
55°	726.3	725.4	724.6	723.7	722.9	720.6	716.8	713.0	709.1	705.3	702.7
57.5°	654.3	653.9	653.5	653.1	652.6	650.8	647.5	644.3	641.0	637.8	634.6
60°	608.9	607.8	606.7	605.6	604.5	602.5	599.4	596.4	593.4	590.4	587.6
62.5°	561.5	560.6	559.8	558.8	557.9	556.3	553.7	551.0	548.5	545.9	543.0
65°	490.4	489.8	489.3	488.7	488.1	486.3	483.3	480.3	477.3	474.3	471.8
67.5°	421.4	420.3	419.1	418.0	416.8	415.1	412.9	410.6	408.4	406.1	404.0
70°	378.0	376.6	375.2	373.8	372.5	370.5	368.0	365.6	363.1	360.7	359.0
72.5°	330.5	329.5	328.7	327.7	326.8	325.5	323.9	322.3	320.8	319.2	317.3
75°	260.6	260.1	259.5	259.0	258.4	257.5	256.1	254.7	253.3	252.0	251.1
77.5°	196.1	195.9	195.7	195.5	195.3	194.8	194.0	193.2	192.4	191.7	191.2
80°	155.6	155.6	155.6	155.6	155.6	155.3	154.8	154.2	153.7	153.1	152.9
82.5°	120.0	119.6	119.1	118.7	118.3	118.0	117.9	117.8	117.7	117.6	117.1
85°	68.0	68.2	68.4	68.8	69.0	69.2	69.2	69.2	69.2	69.2	68.9
87.5°	26.8	26.9	27.1	27.3	27.4	27.5	27.4	27.3	27.3	27.2	27.3
90°	0.5	1.3	2.1	2.9	3.6	4.4	5.1	5.9	6.5	7.2	7.8
92.5°	10.9	11.5	12.0	12.6	13.2	13.9	14.7	15.6	16.5	17.3	18.0
95°	29.4	29.5	29.8	29.9	30.2	30.8	31.8	32.8	33.8	34.8	35.5
97.5°	48.8	48.9	49.0	49.0	49.1	49.8	51.3	52.6	54.0	55.4	56.1
100°	63.3	63.3	63.3	63.3	63.3	63.9	65.2	66.5	67.8	69.2	70.0
102.5°	78.8	79.2	79.6	80.0	80.4	81.0	81.6	82.3	82.9	83.6	84.6
105°	103.1	103.5	104.0	104.6	105.0	105.6	106.2	106.8	107.4	108.0	108.6
107.5°	129.8	130.3	130.8	131.3	131.8	132.3	132.8	133.2	133.6	134.1	134.4
110°	148.2	148.7	149.2	149.7	150.3	150.7	150.9	151.2	151.5	151.9	152.2



TEST NUMBER: P333311-927

CATALOG NUMBER: S125DIP-S1270D590U927-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	167.0	167.3	167.5	167.8	168.1	168.4	168.8	169.1	169.5	169.9	170.1
115°	194.8	195.2	195.6	196.0	196.4	196.7	196.9	197.1	197.3	197.5	197.4
117.5°	222.6	222.8	223.0	223.2	223.3	223.6	223.7	223.9	224.0	224.3	224.3
120°	240.0	240.5	241.0	241.5	242.0	242.2	242.4	242.5	242.6	242.6	242.6
122.5°	258.8	259.0	259.1	259.3	259.5	259.7	260.0	260.2	260.5	260.8	260.7
125°	284.2	284.9	285.4	286.1	286.7	287.0	287.1	287.2	287.3	287.4	287.2
127.5°	311.4	311.7	312.0	312.4	312.8	313.0	313.1	313.2	313.3	313.5	313.4
130°	327.6	328.1	328.7	329.2	329.6	330.0	330.2	330.4	330.6	330.8	330.7
132.5°	343.9	344.8	345.5	346.3	347.2	347.6	347.5	347.5	347.5	347.5	347.4
135°	369.6	370.3	370.9	371.5	372.1	372.4	372.6	372.6	372.7	372.8	372.8
137.5°	393.9	394.5	395.1	395.6	396.2	396.6	396.9	397.0	397.3	397.5	397.6
140°	409.4	410.0	410.4	410.9	411.5	411.9	412.2	412.5	412.7	413.0	413.3
142.5°	425.0	425.4	425.8	426.3	426.7	427.1	427.5	427.9	428.3	428.6	428.7
145°	447.8	448.2	448.7	449.1	449.5	449.8	450.1	450.4	450.8	451.0	451.0
147.5°	469.0	469.2	469.4	469.7	469.9	470.1	470.3	470.6	470.9	471.1	471.3
150°	483.1	483.0	482.9	482.8	482.7	482.8	483.2	483.6	484.0	484.4	484.4
152.5°	494.6	494.8	495.0	495.1	495.2	495.4	495.5	495.7	495.8	496.1	496.3
155°	512.5	512.5	512.5	512.5	512.5	512.5	512.6	512.7	512.9	512.9	513.3
157.5°	528.4	528.1	527.9	527.8	527.5	527.4	527.5	527.7	527.8	527.8	528.2
160°	537.8	537.5	537.2	536.9	536.5	536.5	536.5	536.7	536.8	536.9	537.3
162.5°	546.1	545.9	545.7	545.4	545.2	545.1	545.1	545.2	545.2	545.2	545.7
165°	557.2	557.0	556.8	556.6	556.4	556.3	556.4	556.6	556.7	556.7	557.1
167.5°	566.6	566.3	565.8	565.4	565.0	564.8	564.8	564.8	564.8	564.8	565.4
170°	571.6	571.2	570.8	570.5	570.1	569.9	569.9	569.9	569.9	569.9	570.5
172.5°	575.3	574.9	574.5	574.1	573.7	573.5	573.5	573.5	573.5	573.5	574.1
175°	579.3	578.9	578.5	578.1	577.7	577.6	577.6	577.6	577.6	577.6	578.1
177.5°	581.5	581.1	580.8	580.5	580.1	580.0	579.9	579.8	579.7	579.6	580.1
180°	580.7	580.7	580.7	580.7	580.7	580.7	580.7	580.7	580.7	580.7	580.7



TEST NUMBER: P333311-927

CATALOG NUMBER: S125DIP-S1270D590U927-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1561.2	1561.2	1561.2	1561.2	1561.2	1561.2	1561.2	1561.2
2.5°	1556.6	1558.9	1561.1	1562.0	1561.9	1561.6	1561.4	1561.2
5°	1548.8	1551.3	1553.8	1554.9	1554.6	1554.3	1554.0	1553.8
7.5°	1533.1	1535.6	1537.9	1539.1	1538.8	1538.5	1538.3	1537.9
10°	1519.9	1522.1	1524.2	1525.2	1525.0	1524.6	1524.4	1524.2
12.5°	1502.2	1504.0	1505.7	1506.6	1506.5	1506.4	1506.4	1506.3
15°	1471.3	1472.7	1474.0	1474.7	1474.7	1474.7	1474.7	1474.7
17.5°	1435.4	1437.1	1438.8	1438.9	1437.6	1436.2	1434.8	1433.5
20°	1408.2	1410.1	1412.0	1412.3	1410.9	1409.5	1408.2	1406.8
22.5°	1377.2	1378.5	1379.7	1379.9	1379.0	1378.0	1377.1	1376.2
25°	1327.6	1328.2	1328.7	1328.6	1327.8	1326.9	1326.1	1325.2
27.5°	1275.6	1275.7	1275.8	1275.4	1274.6	1273.8	1273.0	1272.2
30°	1237.7	1237.2	1236.6	1236.0	1235.1	1234.3	1233.4	1232.6
32.5°	1199.3	1198.3	1197.3	1196.0	1194.6	1193.1	1191.6	1190.2
35°	1139.7	1138.4	1137.0	1135.2	1133.0	1130.8	1128.6	1126.4
37.5°	1077.1	1075.1	1073.1	1071.4	1070.2	1068.9	1067.6	1066.4
40°	1033.8	1031.3	1028.8	1027.2	1026.4	1025.6	1024.7	1023.9
42.5°	990.8	988.5	986.3	984.5	983.3	982.0	980.7	979.5
45°	927.2	923.8	920.6	918.5	917.7	916.9	916.0	915.2
47.5°	860.1	856.7	853.4	850.8	848.8	846.9	845.0	843.1
50°	814.2	810.6	807.1	804.3	802.4	800.5	798.6	796.6
52.5°	769.6	766.5	763.3	760.7	758.6	756.5	754.3	752.2
55°	700.3	697.8	695.4	693.2	691.3	689.4	687.4	685.5
57.5°	631.4	628.3	625.1	623.0	621.9	620.9	619.8	618.8
60°	584.9	582.2	579.4	577.1	575.1	573.2	571.3	569.4
62.5°	540.0	537.0	534.1	531.9	530.4	528.9	527.4	525.9
65°	469.4	466.8	464.4	462.6	461.5	460.4	459.3	458.2
67.5°	402.0	399.8	397.8	396.4	395.7	395.1	394.4	393.7
70°	357.4	355.7	354.0	352.7	351.6	350.5	349.4	348.3
72.5°	315.4	313.5	311.7	310.2	309.1	308.0	306.9	305.8
75°	250.3	249.5	248.7	247.7	246.6	245.5	244.4	243.3
77.5°	190.7	190.2	189.7	189.1	188.3	187.5	186.8	186.0
80°	152.6	152.3	152.0	151.6	151.1	150.5	150.0	149.5
82.5°	116.6	116.1	115.6	115.3	115.2	115.1	114.9	114.9
85°	68.6	68.4	68.0	67.7	67.1	66.5	66.0	65.4
87.5°	27.3	27.4	27.6	27.4	27.0	26.6	26.3	25.9
90°	8.2	8.7	9.3	9.7	10.0	10.2	10.5	10.9
92.5°	18.7	19.3	20.0	20.4	20.7	20.9	21.1	21.3
95°	36.2	36.9	37.6	38.0	38.3	38.5	38.7	38.9
97.5°	56.7	57.4	58.1	58.5	58.5	58.7	58.8	58.9
100°	71.0	71.9	72.7	73.3	73.5	73.8	73.9	74.1
102.5°	85.6	86.6	87.5	88.2	88.5	88.7	89.0	89.3
105°	109.2	109.8	110.4	110.9	111.1	111.5	111.8	112.1
107.5°	134.8	135.1	135.3	135.5	135.5	135.5	135.4	135.4
110°	152.4	152.7	153.0	153.1	153.0	153.0	152.8	152.7



TEST NUMBER: P333311-927

CATALOG NUMBER: S125DIP-S1270D590U927-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	170.2	170.3	170.5	170.5	170.3	170.1	169.9	169.8
115°	197.3	197.2	197.1	197.0	196.9	196.8	196.7	196.6
117.5°	224.4	224.5	224.6	224.4	224.0	223.6	223.2	222.8
120°	242.6	242.6	242.6	242.5	242.1	241.7	241.3	240.9
122.5°	260.6	260.5	260.5	260.2	259.9	259.6	259.3	259.0
125°	287.0	286.8	286.6	286.5	286.4	286.3	286.1	286.1
127.5°	313.2	313.1	313.1	312.9	312.7	312.5	312.3	312.1
130°	330.6	330.5	330.4	330.3	330.0	329.9	329.6	329.5
132.5°	347.2	347.1	347.1	346.8	346.6	346.3	346.0	345.7
135°	372.8	372.8	372.8	372.6	372.2	371.9	371.5	371.1
137.5°	397.8	397.8	398.0	397.8	397.3	396.8	396.3	395.8
140°	413.4	413.7	413.8	413.7	413.2	412.7	412.2	411.7
142.5°	428.8	429.0	429.0	428.9	428.4	427.9	427.4	426.9
145°	451.0	451.0	451.0	450.8	450.6	450.3	450.0	449.6
147.5°	471.6	471.8	472.1	471.8	471.1	470.5	469.8	469.1
150°	484.4	484.4	484.4	484.3	484.2	483.9	483.8	483.5
152.5°	496.5	496.8	497.0	496.9	496.5	496.2	495.8	495.5
155°	513.7	514.1	514.5	514.5	514.0	513.5	512.9	512.5
157.5°	528.6	529.0	529.4	529.3	528.6	528.0	527.4	526.6
160°	537.7	538.1	538.4	538.4	538.0	537.4	536.9	536.5
162.5°	546.1	546.6	547.2	547.1	546.5	545.9	545.3	544.7
165°	557.5	557.9	558.4	558.3	557.7	557.1	556.4	555.9
167.5°	566.0	566.6	567.2	567.2	566.6	565.9	565.3	564.7
170°	571.1	571.6	572.3	572.2	571.6	570.8	570.1	569.4
172.5°	574.7	575.3	575.9	575.9	575.3	574.6	574.0	573.4
175°	578.8	579.3	580.0	579.9	579.2	578.5	577.8	577.1
177.5°	580.6	581.1	581.5	581.5	581.0	580.4	579.8	579.2
180°	580.7	580.7	580.7	580.7	580.7	580.7	580.7	580.7

(END OF REPORT)